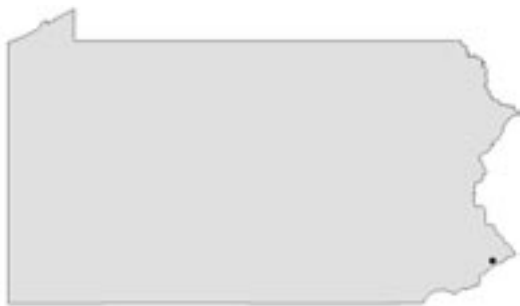


Office Location:  
Philadelphia



DELAWARE VALLEY INDUSTRIAL RESOURCE CENTER (DVIRC) Serves the five counties in southeastern Pennsylvania. The counties are Bucks, Chester, Delaware, Montgomery and Philadelphia. Contact: Joseph Houldin, 2905 Southampton Road, Philadelphia, PA 19154, (215) 464-8550, Fax: (215) 464-8570, Email: jhouldin@dvirc.org, Website: <http://www.dvirc.org>

## THE MANUFACTURING EXTENSION PARTNERSHIP IN PENNSYLVANIA

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like DVIRC, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

### COMPANY CLIPS

#### Athena Controls Initiates Lean Procedures

Athena Controls, located in Plymouth Meeting, offers temperature control solutions in four major areas of the control loop: panel and sub-panel controllers, SCR power handlers, solid-state relays, and temperature sensors. The company's less than 250 employees will gladly modify or custom-engineer controllers with options to satisfy special original equipment manufacturers (OEM) requirements. Athena Controls found that, in order to remain competitive, it needed to trim waste from the business and improve efficiency and productivity. The company contacted the Delaware Valley Industrial Resource Center (DVIRC) to help support that initiative.

DVIRC met with Athena Controls and developed a training strategy to supplement its initiative. DVIRC introduced the company to the basic principles behind lean manufacturing during a lean overview attended by company employees. After offering a basic overview to Athena employees, DVIRC conducted its Lean 101 workshop for a company-selected cross-functional team to teach the specifics of lean manufacturing and to raise awareness of how to eliminate waste and add value to the process. After learning the principles of lean manufacturing, Athena employees worked with DVIRC to implement a "5S" program. Using the five principles of Sort, Set in Order, Shine, Standardize, and Sustain (5S) Athena cleaned and reorganized the shop floor and office space to create a more efficient work environment. With an increase in efficiency came a 25 percent increase in production, a 50 percent lead-time reduction, and a 20 percent reduction of work-in-process.

#### Delaware Ribbon Manufacturing Improves On-Time Delivery

Delaware Ribbon Manufacturing was established in 1940 and is currently operated by the fourth generation of the founding family. The company manufactures gift ribbons and bows, with a high seasonal content at Christmas. Delaware Ribbon Manufacturing is

*Continued*

### STATE STATS

DATA\* COVERS JANUARY TO DECEMBER 2001

Number of projects completed  
with firms  
**297**

Number of firms served  
**164**

Number of firms served for  
the first time  
**199**

Federal cost share for current  
operating year  
**\$1,344,000**

State/other cost share for current  
operating year  
**\$2,688,000**

*\*Data as reported from center*

DATA\*\* COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales  
**\$87,810,010**

Client capital investment  
**\$14,674,301**

Total cost savings  
**\$16,795,513**

Jobs (created & retained)  
**439**

*\*\*Source: Independent client impact survey*

For additional information,  
contact Dede McMahon 301-975-5020



located in a five-story, 65,000 square-foot facility with another 120,000 square-feet of warehouse space in two off-site facilities. It has a union workforce of less than 250 people.

Delaware Ribbon Manufacturing needed to improve its on-time delivery performance. The company believed the biggest impediment to achieving this goal was the length of set-up times for long production runs. Delaware Ribbon Manufacturing contacted the Delaware Valley Industrial Resource Center (DVIRC) for help facilitating and implementing a set-up reduction plan.

DVIRC spent two days working to reduce the set-up time for the Meyers Ribbon Spooling Machine. A cross-functional team of employees participated in the event. DVIRC led the team through classroom instruction and a review of videotapes from set-up events at other manufacturers to introduce new ways of accomplishing goals and “thinking outside the box.” The next step took DVIRC and the team onto the shop floor to observe and videotape the current set-up process. Team members performed the sample set-up as well as recorded and timed the steps of the process.

The team reviewed the videotape and made observations, then performed a reduction analysis with the help of DVIRC. The team compiled an improvement list and performed machine and tooling modifications immediately where feasible. Building on observations and recent improvements, the team performed and videotaped another set-up to measure and validate improvements. Set-up time for the Meyers Ribbon Spooling Machine decreased by 85 percent, and Delaware Ribbon Manufacturing improved its on-time delivery performance proportionally.